

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (New): A syntactic polyurethane prepared by the process of reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

in the presence of

c) hollow microspheres,

the polyol constituent

b2) comprising the constituents

b2-1) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from 400 to 3500 g/mol and

b2-2) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from more than 3500 to 8000 g/mol.

Claim 12 (New): The syntactic polyurethane according to claim 11, wherein the
polyol component b) additionally comprises a constituent

b4) a polyetherpolyol based on an initiator molecule which is
tetrafunctional or has a higher functionality.

Claim 13 (New): The syntactic polyurethane according to claim 11, wherein the individual constituents of the polyol component b) are selected so that the polyol component b) has a viscosity at 25°C of less than 500 mPa.s, measured according to DIN 53019.

Claim 14 (New): The syntactic polyurethane according to claim 11, wherein the component

b1) is present in an amount of from 20 to 60% by weight, the component
b2) is present in an amount of from 20 to 60% by weight, and the component
b3) is present in an amount of from 5 to 25% by weight,
based on the total weight of the polyol component b).

Claim 15 (New): A process for the preparation of syntactic polyurethanes by reacting

- a) a polyisocyanate component with
- b) a polyol component,

the polyol component b) comprising the constituents

- b1) a polyetherpolyol based on a difunctional initiator molecule,
- b2) a polyetherpolyol based on a trifunctional initiator molecule and
- b3) a chain extender,

in the presence of

- c) hollow microspheres,

the polyol constituent b2) comprising the constituents

- b2-1) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from 400 to 3500 g/mol and
- b2-2) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from more than 3500 to 8000 g/mol.

Claim 16 (New): A method of using for insulating offshore pipes a syntactic polyurethane prepared by the process of reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

in the presence of.

c) hollow microspheres.

Claim 17 (New): An offshore pipe composed of

(i) an inner pipe and, adhesively applied thereto,

(ii) a layer of a syntactic polyurethane prepared by the process of reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule

and

b3) a chain extender,

in the presence of

c) hollow microspheres.

Claim 18 (New): The offshore pipe according to claim 17, wherein the layer (ii) of syntactic polyurethane has a thickness of from 5 to 200 mm.

Claim 19 (New): A process for the production of offshore pipes according to claim 17 , comprising the steps

- 1) providing an inner pipe which is to be coated with syntactic polyurethane,
- 2) rotating said pipe to be coated and
- 3) applying to the rotating pipe an unreacted reaction mixture for the production of the layer of syntactic polyurethane, comprising the components a), b) and c).